## Claims As Pending

6. (original) A method for site-directed mutagenesis of a nucleic acid molecule comprising the steps of :

a) hybridizing a mutagenic oligonucleotide to a target region of a double-stranded nucleic acid molecule, wherein the mutagenic oligonucleotide comprises a mutagen incorporated into a single-stranded nucleic acid that forms a triple-stranded nucleic acid molecule with the target region; and

b) mutating the double-stranded nucleic acid molecule.

7. (original) The method of claim 6 comprising the additional step of activating the mutagen prior to the mutation step.

8. (original) The method of claim 6 wherein the mutagen is selected from the group consisting of psoralen and acridine orange and is activated by light.

9. (original) The method of claim 6 wherein the mutagen is selected from the group consisting of acridine orange, an alkylating agent, a cis-platinum analog, a hematoporphyrin, a hematoporphyrin derivative, mitomycin C, a radionuclide, and a molecule that interacts with radiation to become mutagenic.

10. (original) The method of claim 6 wherein the mutation alters the activity of the double-stranded nucleic acid molecule.

11. (original) The method of claim 6 wherein the double-stranded nucleic acid molecule is a gene.

12. (original) The method of claim 6 wherein the gene is an oncogene.

13. (original) The method of claim 6 wherein the gene is a defective gene.

14. (original) The method of claim 6 wherein the double-stranded nucleic acid molecule is all or a portion of a viral genome.